

MEASURING THE COMPLIANCE COSTS OF EXCISE TAXATION

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Jonathan Haughton
Suffolk University and Harvard Institute
for International Development

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ABSTRACT

This short methodological discussion paper defines, and then explains how to measure, the compliance costs of taxation. These are the costs incurred by taxpayers in their efforts to comply with the tax laws. The paper summarizes the categories of compliance costs, discusses some of the conceptual difficulties that arise in measuring these costs, and reviews the main practical approaches to measuring them. The paper includes a questionnaire, jointly developed with Christine Shekidele, which was used in the EAGER excise project to help collect information on the compliance costs of excise taxation in Tanzania.

Jonathan Haughton [jhaughto@sclas.suffolk.edu] is an Assistant Professor of Economics at Suffolk University in Boston and a Faculty Associate at the Harvard Institute for International Development. Dr. Haughton has taught, lectured, consulted, or conducted research in 20 countries on four continents. He has published extensively on taxation, demography, and farm household modeling, and is the coeditor of two forthcoming books on Vietnam. He is the Principal Investigator of the EAGER project study of excise taxation.

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INTRODUCTION

Taxes inflict three main categories of cost on society. Efficiency costs arise when producers and consumers alter their behavior in order to reduce their tax payments. Administrative costs are incurred by the government in designing, applying, assessing, collecting and auditing taxes. And compliance costs are those costs borne by the taxpayer in complying with the tax laws.

Most of the economics literature has focused exclusively on the efficiency costs. Very little has been written about the size and measurement of compliance costs. The most important exception is the research which has been done by Cedric Sandford and his co-workers, culminating in a book entitled *Administrative and Compliance Costs of Taxation* (by Cedric Sandford, Michael Godwin and Peter Hardwick; Fiscal Publications, Bath, 1989), on which this methodological note draws heavily. Their work, and that of others, shows that administration and compliance costs are typically at least as important as efficiency costs, despite their low visibility. Moreover the burden of compliance costs tends to be inequitable, falling more heavily on small firms.

On the other hand, one of the alleged strengths of excise taxes is that they impose very low compliance costs. There is some limited evidence to support this assertion. The data in Table 1 come from the Sandford et al. study (p.168), and show the size of administrative and compliance costs as a percentage of revenue collected, for the main excise taxes in the UK in 1986-87. Administrative costs amounted to 0.25% of revenue, and compliance costs to a further 0.20%, which are low proportions by any standard. Until very recently, no studies of compliance costs had been done in Africa (or in almost any less-developed countries), so little information is known about whether a similar pattern holds in this context.

In this methodological note we

- define compliance costs more fully
- consider some of the practical problems involved in measuring compliance costs, and
- outline a methodology for estimating compliance costs for excise taxes.

A sample questionnaire, suitable for a study of compliance costs, is appended.

Table 1***Administrative and Compliance Costs of Main Excises in UK, 1986-87***

	Administrative Costs	Compliance Costs
	<i>(as % of tax revenue)</i>	
Hydrocarbon oil	0.10	0.23
Tobacco products	0.08	0.06
Alcoholic drinks	0.72	0.31
Overall	0.25	0.20

Source: Sandford et al., Table 10.3, p.168.

COMPLIANCE COSTS DEFINED

According to Sandford et al., compliance costs are defined as “those costs incurred by taxpayers, or third parties such as businesses, in meeting the requirements laid upon them in complying with a given tax structure” (p.10). For a business these costs include the costs of collecting, remitting and accounting for tax on their products, profits, and employees, along with the cost of acquiring a knowledge of the legal obligations and penalties. The costs fall into three main groups:

1. *Money Costs.* These include:
 - a) the “clerical costs,” which in turn may be split into two parts:
 - i) employee costs, covering the expense of in-house staff, including managers and clerks dealing with tax collections, assessment and payments; and
 - ii) external costs, which include the fees paid to outside accountants and other advisors regarding tax interpretations, tax compliance, and other relevant matters;
 - b) the time cost of money (i.e. the cost of having to pay tax before receiving payments from sales; for further details, see below);
 - c) the additional costs of insurance, security, etc. to guard goods whose value (to the consumer) has been raised by high excise tax rates; and
 - d) the cost of posting bond (where applicable).
2. *Time Costs.* These cover the value of time spent dealing with taxes by the proprietor of a small business; in principle this can be converted into a monetary value.
3. *Psychic Costs.* This measures the resentment that a businessperson may feel at having to act as an unpaid tax collector, or at having to deal with tax officials. These costs are hard to measure.

It is worth noting that administrative and compliance costs may be substitutable. For instance, suppose a tax department moves to a system of self-assessment from one where

the tax office computes the tax owed. This reduces the burden on the tax office, so administrative costs fall. On the other hand it increases the burden on the firm, so compliance costs rise. So ideally one should measure the burden of administrative and compliance costs combined.

MEASUREMENT ISSUES

There are a number of practical and conceptual difficulties involved in measuring compliance costs, and they include the following:

How allocate overhead? As a practical matter it may be difficult, or impossible, to measure what proportion of overhead costs (management time, part of the head office costs, etc.) is attributable to dealing with tax issues. Even outside auditors and accountants, who may advise the firm on a variety of matters, including taxation, may not itemize their bills in such a way that allows one to separate the time they spent on tax issues from time spent on other tasks.

How isolate the marginal costs of complying with a given tax? When a firm has to pay several taxes (e.g. sales tax, excise taxes, corporation income tax, PAYE), it may employ a number of specialists simply to deal with tax issues. But frequently it is very difficult to determine how much of this cost is attributable to a given tax. Put another way, it may be almost impossible to measure how much a firm would save if, say, it no longer had to collect any excise taxes.

How value time? It is straightforward to measure the value of time spent on tax issues by outside experts (the fee paid) and by employees (wages or salary plus other obligatory contributions such as health insurance costs). It is more difficult to value the time of the owner of the firm, and particularly difficult to measure time spent on tax questions when the time would otherwise have been spent on leisure.

How handle changing costs over time? The costs of tax compliance are likely to be high when a tax is newly introduced or significantly modified. The *commencement costs* occur before the tax even begins; they are followed by *temporary costs* that occur as taxpayers and tax administrators iron out the bugs in the tax and learn how to operate it successfully. Once these learning-curve effects have passed, one is left with the *regular costs* of the tax, which are the ones we are most concerned to measure.

How measure the time costs of taxes? Suppose a firm pays \$1000 in tax to the government on January 1, but the goods (which we assume are taxable at the time of retail sale) are not sold until April 1. Then the firm has provided a \$1,000 zero-interest loan to the government for three months. This imposes a substantial cost on the firm: if the firm has to pay 16% annually to borrow, then the time cost of the early payment of taxes is about \$40 (= 4% of \$1,000, approximately). The situation is worse for the firm if it sells the goods on April 1, but is not actually paid until 30 days later, although in this case the buyer receives an equivalent benefit so there is no further net cost to the economy in this case.

In the opposite case the firm may pay the tax well after it formally comes due, in which case the government is in effect allowing the firm to use the tax revenue for some weeks, free of interest. It is worth noting that the time cost of paying taxes early is not a net cost to society, because what the firm loses is exactly offset by a gain to the government; it does however affect the distribution of the burden of the tax.

ESTIMATING COMPLIANCE COSTS

Sandford et al. (p.52) note that any of the methods of social research may be used in measuring compliance costs. The methods relevant for studying excise compliance costs include the following:

- Highly structured questionnaires/interview schedules, whether administered by mail, phone, or face to face.
- Semi-structured or unstructured interviews.
- Other types of case study (e.g. studies of the comprehensibility of tax forms).
- Archive research, using records held by government departments, tax advisors, etc.

The response rate for mail questionnaires tends to be low, particularly if the questionnaire is long or elaborate. Face to face interviews are expensive in that they require a lot of time, but they elicit the most reliable information and give the researcher a good “feel” for the issues.

A practical way to proceed is as follows:

1. Ask official and other sources about the most important excise taxes, their tax points, tax base, tax rates, and the amount of tax revenue collected. A meeting with a knowledgeable tax official is likely to be useful at this point.
2. Once it is clear what the main excise taxes are, identify the most important firms, defined as those that pay a significant amount of excise taxes. This will surely include the main tobacco companies, brewers and distillers, oil refiners, and probably some import firms. The list should be as comprehensive as possible, and cover all the formal sector firms; informal producers, essentially by definition, do not pay taxes.
3. Send a questionnaire to all the firms listed in 2 - or to a sample (e.g. all the big firms, and a fraction of the small ones) if the number of firms is too large. It may be helpful to telephone the companies first, in order to find out to whom the questionnaire should be sent within the company. Ask for the questionnaire to be completed and returned, but indicate that if necessary you would like to follow up by phone, or with a face to face interview. A sample questionnaire, with a cover letter, is shown in the appendix.
4. Follow up the questionnaire by phone or in person within a week or two of sending the questionnaire. Try both to complete the questionnaire and to develop a good sense of the main issues and magnitudes. In the words of Keynes, “it is better to be approximately right than precisely wrong.” It is particularly important to talk with

someone from the main companies in the three main areas - petroleum, alcohol, and tobacco. One good interview is worth dozens of questionnaires.

The response rate on mail questionnaires is generally low. For instance George Kuo had a response rate of 20-25% for a survey of tax compliance in Canada. So an alternative approach is to rely entirely on face-to-face interviews from the start; or at least face-to-face interviews with the large firms, and a mail questionnaire with a few follow-up interviews for small firms. In George Kuo's words, this "may give ... a better and robust picture of the compliance costs."

IN SUM

The research will be successful if, by the end, one can answer the following questions about excise taxes with some confidence:

- As a fraction of sales, about how large are compliance costs (for alcohol, tobacco, and petroleum)?
- Do compliance costs fall more heavily on smaller firms, and how large is this effect?
- What could be done to reduce compliance costs (without reducing revenue)?
- If excise taxes were extended to more goods and services, what effect would this have on compliance costs?

Since work of this type is still at the frontier of research, great precision is not expected, although it should be possible to develop a good sense of the magnitudes.

APPENDIX
SAMPLE QUESTIONNAIRE

Survey Research Department
Harvard Institute for International Development

March 1997

**SURVEY OF COSTS TO BUSINESSES OF
OPERATING DIRECT TAXES, 1997**

Dear Sir/Madam,

I am writing to ask for your help. As part of a larger study of excise taxation, we are trying to understand better the costs faced by companies, such as yours, as they try to comply with the tax laws.

Our hope is that such an understanding will lead to a more rational tax structure and less burdensome procedures. As far as we know, this is the first such study in Africa.

This is an independent study by the IWR, working in cooperation with HIID. Although I have been helped in understanding the tax system by the Ministry of Finance and the Revenue Authority, no information has been given to me about your business, so I will only know what you choose to tell me. Your answers to the following questions will be held *in strict confidence*, and will not be seen by any tax official.

I would be very grateful if you would fill in the questionnaire and return it in the enclosed pre-paid envelope as soon as possible.

Thank you in advance for your help and cooperation,

Yours Sincerely

Bigg J. Cheese
Head, Tax Department

COMPLIANCE COSTS OF TAXATION QUESTIONNAIRE

In the following questions, the term *excise taxes* should be taken to include any taxes that are levied on a specific good or service, even if they are known by another name. Excise taxes do not include general sales taxes or VAT, or income taxes, or basic taxes on imports or exports.

1. What is the name of your organization?

2a. What is your main business activity?

2b. What are your main *excisable* business activities?

i)

ii)

iii)

3. When was the business first registered for excise taxes?

4. On what date did your last accounting year end?

Day _____ Month _____ Year _____

5. Please check the appropriate value of turnover (i.e. sales of goods and services) for your business in your last accounting year.

In millions of Tsh	Total turnover	Turnover subject to excise tax
Under 1	<input type="checkbox"/>	<input type="checkbox"/>
1.0 - 2.49	<input type="checkbox"/>	<input type="checkbox"/>
2.5 - 4.99	<input type="checkbox"/>	<input type="checkbox"/>
5.0 - 9.99	<input type="checkbox"/>	<input type="checkbox"/>
10.0 - 19.99	<input type="checkbox"/>	<input type="checkbox"/>
20.0 - 49.99	<input type="checkbox"/>	<input type="checkbox"/>
50.0 - 99.99	<input type="checkbox"/>	<input type="checkbox"/>
100.0 - 499.99	<input type="checkbox"/>	<input type="checkbox"/>
500.0 or more	<input type="checkbox"/>	<input type="checkbox"/>

Please state approximate turnover: Tsh million: _____

Please state approximate turnover subject to excise tax: Tsh million:

6. Do you employ an outside tax advisor or an accountant in private practice to help do your excise tax work?

Yes / No

If the answer is no, go directly to question 10.

7. From whom do you obtain tax advice? (Please check as appropriate)

	For excise taxes	For sales taxes	For trade taxes (i.e. import and customs duties)
Paid tax consultant	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Paid accountant	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Friend/family member	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Other (please describe)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

8. a. How much were you charged for each of the following types of work by your advisor(s) in the last accounting year? (Where precise figures are not available, please give an approximate breakdown.)

Amount in Tsh per year

Preparation of books of account, and audit fee
Work on sales taxes
Work on excise taxes (including all specific taxes)
Work on trade taxes
Work on personal and corporation income taxes
Other tax work (please describe):

8. b. How much time did you spend discussing excise taxes with your tax advisor during the last accounting year?

About _____ hours

Cost per hour for tax advisor: Tsh _____

Value per hour of own time: Tsh _____

9. For each of the main specific taxes (e.g. excise, etc.) that you pay, what is the tax point?

<i>What tax?</i>	1.	2.	3.	4.
<i>What tax point?</i>				
Retail sale	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Wholesale sale	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Factory gate	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Customs border	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Other (please specify)				

10. For each of the main specific taxes that you pay, what is the base for the tax?

<i>What tax?</i>	1.	2.	3.	4.
<i>What tax base?</i>				
Pre-tax value	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
After-tax value	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Volume	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Weight	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Volume of alcohol content	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Other (please specify)				

11. a. How often do you submit excise tax returns? (e.g. end of each month, quarterly, etc.). Please explain briefly.

b. If returns are submitted more than once per year, do these returns:

show the actual amount of tax due? Yes / No

or the estimated amount of tax due? Yes / No

c. Who determines the amount of tax due (e.g. the firm, a tax agent, etc.)?

d. Is there an annual return, which makes a final calculation of excise tax due for the whole accounting year?

Yes / No (the subannual returns are final returns)

- 12a. For each of the main excises, how long is the lag between the time the tax is paid and when your firm receives revenue from sales - for those cases where revenues come in later than tax is paid:

What tax? 1. 2. 3. 4.

Lag between tax payment and sales
(in weeks)

- 12b. For the main excises, how long is the lag between when the firm receives revenue from sales and when the tax is actually paid - for those cases where tax is paid after revenues are received:

What tax? 1. 2. 3. 4.

Lag between sales and tax payment
(in weeks)

13. How large are the penalties for late payment of excise tax ...

in law? About Tsh _____ per week / month / year for every Tsh1000 late.

in practice? About Tsh _____ per week / month / year for every Tsh1000 late.

14. Do the excise taxes make adequate allowance for losses (e.g. broken bottles, spillage, etc.)?

Yes / No / Not applicable

If yes, please explain:

15. Please complete a separate box below for each of the main forms used in determining excise tax liability

Name or title of form:

On a scale of 1 (very good) to 5 (very poor), how would you rate the tax form, using the following dimensions (circle as appropriate)

the clarity of the questions	1	2	3	4	5	
the ease with which the form can be used	1	2	3	4	5	
the adequacy of supporting instructions	1	2	3	4	5	no supporting instructions
the usefulness of advice from the tax department	1	2	3	4	5	advice not sought advice not available

Name or title of form:

On a scale of 1 (very good) to 5 (very poor), how would you rate the tax form, using the following dimensions (circle as appropriate)

the clarity of the questions	1	2	3	4	5	
the ease with which the form can be used	1	2	3	4	5	
the adequacy of supporting instructions	1	2	3	4	5	no supporting instructions
the usefulness of advice from the tax department	1	2	3	4	5	advice not sought advice not available

Name or title of form:

On a scale of 1 (very good) to 5 (very poor), how would you rate the tax form, using the following dimensions (circle as appropriate)

the clarity of the questions	1	2	3	4	5		
the ease with which the form can be used	1	2	3	4	5		
the adequacy of supporting instructions	1	2	3	4	5	no supporting instructions	
the usefulness of advice from the tax department	1	2	3	4	5	advice not sought	advice not available

Name or title of form:

On a scale of 1 (very good) to 5 (very poor), how would you rate the tax form, using the following dimensions (circle as appropriate)

the clarity of the questions	1	2	3	4	5		
the ease with which the form can be used	1	2	3	4	5		
the adequacy of supporting instructions	1	2	3	4	5	no supporting instructions	
the usefulness of advice from the tax department	1	2	3	4	5	advice not sought	advice not available

16. Apart from any advice mentioned above, what costs (if any) did you incur in keeping records and complying with excise taxes for excise taxes during the last accounting year?

Cost in Tsh per year

Cost of an in-house bookkeeper
Cost of someone to count output for tax purposes
Cost of tax forms and other materials
Cost of calculators
Cost of computers
Cost of software
Other costs (please describe)

17. a. Did any changes in the provisions or the rules on excise taxes that were introduced over the past two years have a significant effect on the costs of complying with the law?

Yes / No

- b. If yes, please describe briefly.

18. a. During the last accounting year, what costs (if any) did you incur in working and/or supervisory work related to excise taxes, other than discussing with your tax advisor (as indicated above)?

	Number of your hours per year	Cost in Tsh per year
Working and complying with excise taxes		
Entertaining tax officers		
Other (please describe briefly)		

19. a. Did your firm provide office or other accommodation, and/or regular meals, to resident or visiting tax officers during the last accounting year?

Yes / No

- b. If yes, please describe briefly.

and indicate the approximate total cost (cash and in kind): Tsh _____

20. Approximately how much did you pay in excise taxes for the last accounting year (please check as appropriate)?

In millions of Tsh	Total payment
Under 1	Ø
1.0 - 2.49	Ø
2.5 - 4.99	Ø
5.0 - 9.99	Ø
10.0 - 19.99	Ø
20.0 - 49.99	Ø
50.0 - 99.99	Ø
100.0 - 499.99	Ø
500.0 or more	Ø

Please state approximate excise tax payment: Tsh million _____

21. Do you own or operate a bonded warehouse?

Yes / No

If the answer is no, go directly to question 30.

22. About how much time did it take for you to fulfill the conditions for approval of premises as a bonded warehouse?

23. For the bonded warehouses that you operate, approximately how much did you pay in association with the bond in the last accounting year?

for license fees: Tsh. _____

for stamp duty: Tsh. _____

24. Approximately how much did you have to pay for the bond in the last accounting year?

Tsh per year

to cover import duty
to cover excise duty
to cover sales tax

25. a. Did you provide a separate secured compartment for storage of goods considered to be very highly taxed?

Yes / No

- b. If yes, please describe the type of goods and give an estimate of the turnover during the last accounting year.

Type of good

Approximate turnover per year, Tsh million

26. a. What additional costs (if any) did you incur in order to ensure security of the bonded warehouse and the installation and reading of checking meters?

Type of cost

Approximate amount per year, Tsh million

27. What costs did you incur, if any, as a result of a tax officer's delay in handling any of the following:

Nature of operation

Cost in last accounting year, Tsh million

Pumping operations from the ship/tipper/refinery
Inspection delays at factory
Other (please specify)

28. How often, if at all, does a tax officer visit the bonded warehouse for examination purposes?

About _____ times during the last accounting year.

29. What costs, if any, did you incur in order to co-operate with the tax officer's random inspections?

Type of cost	Approximate cost per year (Tsh)
Time to meet with tax officer	
Preparation of documents and accounts	
Miscellaneous	

30. In the space below, please make any comments you wish about your views on specific taxes (i.e. excises, etc.) in Tanzania, and any suggestions you wish to make about improving the current system.

Thank you for your time and for your help with this research project.

We would be happy to send you a copy of the report of this study. Would you like a copy?

No / Yes, please send a copy of the report to:
